

~~antibody production, or the capacity of enhancing the expression of at least one costimulator on macrophages or other antigen presenting cells.~~

3. (withdrawn) ~~The immunogen carrier complex of claim 1, wherein said immunogen is selected from the group consisting of a peptide, a protein, an hapten, and an allergen.~~
4. (withdrawn) ~~The immunogen carrier complex of claim 1, wherein said immunogen is a viral, a bacterial, or a parasitical protein or fraction thereof capable of inducing an immune response in a human or an animal.~~
5. (withdrawn) ~~The immunogen carrier complex of claim 1, wherein said immunogen is in carboxy or amino terminal fusion with a capsid, coque, or membrane protein of said VLP.~~
6. (withdrawn) ~~The immunogen carrier of claim 1, wherein said VLP is a virus, a virus particle, a virion or a particle derived from assembly of a viral coat protein.~~
7. (withdrawn) ~~The immunogen carrier complex of claim 1, wherein said VLP is selected from the group consisting of a plant potexvirus.~~
8. (withdrawn) ~~The immunogen carrier complex of claim 7, wherein said potexvirus is a papaya mosaic virus.~~
9. (withdrawn) ~~The immunogen carrier complex of claim 1, wherein said immunogen is in fusion at the outer surface of said VLP.~~
10. (withdrawn) ~~The immunogen carrier complex of claim 1, wherein said immunogen is composed of one or more antigen domain, each antigen domain triggering a specific immune response.~~

11. (withdrawn) ~~The immunogen carrier complex of claim 1, wherein said VLP is carrying immunogens having more than one specificity.~~
12. (withdrawn) ~~A method for immunopotentiating an immune response in a human or an animal which comprises administering to said human or animal an immunogen carrier consisting of a viral-like particle (VLP) carrying at least one immunogen in fusion with a protein or fragment thereof of said VLP, or administering a VLP or a fragment thereof concomitantly with an antigen not directly linked to said VLP.~~
13. (withdrawn) ~~A polynucleotide encoding a immunogen carrier complex consisting of a viral-like particle (VLP) carrying at least one immunogen in fusion with a protein or A polynucleotide encoding a immunogen carrier complex consisting of a fragment thereof of said VLP, or a VLP alone, said immunogen carrier complex having the capacity of being assembled when expressed in a plant cell, an animal cell or a microorganism.~~
14. (withdrawn) ~~Use of a VLP or an immunogen carrier complex consisting of a viral-like particle (VLP) carrying at least one immunogen in fusion with a protein or fragment thereof of said VLP in the preparation of a composition for inducing an immune response against said protein or fragment thereof.~~
15. (withdrawn) ~~A composition for immunopotentiating an immune response against an antigen comprising VLP or an immunogen carrier complex consisting of a viral-like particle (VLP) carrying at least one immunogen in fusion with a protein or fragment thereof of said VLP.~~
16. (withdrawn) ~~An immunopotentiator comprising VLP or a fragment thereof.~~
17. (withdrawn) ~~A composition comprising a viral-like particle (VLP) and a protein or an extract derived from a virus, bacteria or parasite.~~

18. (withdrawn) ~~The composition according to claim 17, for use as a vaccine.~~

19. (withdrawn) ~~Use of a papaya mosaic virus as an adjuvant.~~

20.(new) A method of potentiating an immune response against an antigen in an animal, said method comprising the step of administering to said animal an antigen and an effective amount of an adjuvant, wherein said adjuvant is a papaya mosaic virus (PapMV), or a virus-like particle (VLP) derived therefrom.

21.(new) The method of claim 20, wherein said PapMV is a wild-type virus.

22.(new) The method of claim 20, wherein said PapMV is a recombinant virus.

23.(new) The method of claim 20, wherein said PapMV is a pseudovirus.

24.(new) The method of claim 20, wherein said antigen is an immunogen.

25.(new) The method of claim 20, wherein said antigen is fused to a protein of said PapMV or VLP.

26.(new) The method of claim 25, wherein said protein is a coat protein.

27.(new) The method of claim 20, wherein said antigen is covalently attached to said PapMV or VLP.

28.(new) The method of claim 20, wherein said antigen and said PapMV or VLP are not linked.

29.(new) The method of claim 20, wherein said antigen and said adjuvant are administered parenterally, enterally or orally to said animal.

- 30.(new) The method of claim 20, wherein said immune response is systemic.
- 31.(new) The method of claim 20, wherein said immune response is a mucosal immune response.
- 32.(new) The method of claim 20, wherein said immune response is a humoral immune response.
- 33.(new) The method of claim 20, wherein said immune response is a cellular immune response.
- 34.(new) The method of claim 20, wherein said antigen is a viral, a bacterial or a parasitical protein, or fraction thereof.
- 35.(new) The method of claim 20, wherein said antigen and said adjuvant are co-administered to said animal.
- 36.(new) The method of claim 20, wherein said adjuvant is administered to said animal prior to administration of said antigen.
- 37.(new) The method of claim 20, wherein said adjuvant is administered to said animal subsequent to administration of said antigen.
- 38.(new) The method of claim 20, wherein said animal is a mammal, bird or fish.
- 39.(new) The method of claim 38, wherein said animal is a mammal.
- 40.(new) The method of claim 38, wherein said animal is a bird.
- 41.(new) The method of claim 38, wherein said animal is a fish.
- 42.(new) The method of claim 20, wherein said animal is a human.

## REGARDING THE AMENDMENTS

Upon entry of the above amendment, claims 20-42 will be pending. Claims 1-19 have been withdrawn without prejudice or disclaimer. Applicant reserves the right to pursue the subject matter of the withdrawn claims in the present application or in a continuation, continuation-in-part, or divisional application.

New claims 20-42 have been added to more clearly define the scope of protection being sought. Applicant asserts that no new matter has been added. Support for the new claims can be found throughout the specification as filed. For example, support for new claims 20 and 21 is found at page 5, paragraph [0017] and at page 15, paragraph [0068]. Support for new claim 22 is found, for example, at page 6, paragraph [0024]. Support for new claim 23 is found, for example, at page 6, paragraph [0027]. Support for new claim 24 is found throughout the specification as filed. Support for new claim 25 is found, for example, at page 4, paragraph [13]. Support for new claim 26 is found, for example, at page 9, paragraph [0045]. Support for new claim 27 is found, for example, at page 10, paragraph [0047]. Support for new claim 28 is found, for example, at page 15, paragraph [0068]. Support for new claim 29 is found, for example, at page 8, paragraph [0040]. Support for new claims 30-33 is found, for example, at page 5 paragraph [0021] and in the Examples. Support for new claims 34 is found throughout the specification and claims as filed. Support for new claims 35-37 is found, for example, at page 15, paragraph [0068]. Support for new claims 38-41 is found, for example, at page 5, paragraph [0021]. Support for new claim 42 is found, for example, at page 4, paragraph [0015].

## ELECTION

Applicant elects, with traverse, Group V relating to a method of using a papaya mosaic virus as an adjuvant. Applicant notes that the Examiner has stated in the Office Action that Group V, consisting of currently pending claim 19, is drawn to a method of using papaya mosaic virus as a vaccine. Claim 19, however, clearly